

-2-

IN THE DRAWING

Please replace the current drawings (original sheets 1-5) with the replacement sheets 1-5 enclosed herewith. Revisions have been made to Figures 1-4 to include the legend "Prior Art". No other changes have been made.

REMARKS

In response to the Office Action mailed January 24, 2007, Applicant respectfully requests reconsideration. The claims as now presented are believed to be in allowable condition.

Claims 1-7 are pending.

In paragraph 1 of the Office Action, a requirement is made to label Figures 1-4 as prior art. Replacement sheets of drawings are included herewith. Figures 1-4 are revised to include the legend "Prior Art" as requested in the Office Action.

In paragraph 2 of the Office Action, claims 4-7 are objected to for having improper multiple dependency form. Claims 4-5 and 7 have been amended to remove the multiple dependencies.

In paragraph 3 of the Office Action, claims 1-7 are rejected under 35 U.S.C. § 112, 1<sup>st</sup> para., as failing to comply with the enablement requirement. Specifically, it is alleged that the following are not clearly explained in the specification:

- (1) What the active area arrangements are and how they are formed and arranged, including whether they are a physical structure or an imaginary structure
- (2) What "restricted fashion" is being referred to in the claims
- (3) The phrase "as well as between the latter"
- (4) The phrase "bounding straight lines...active area"

The above objections are addressed in turn below.

With respect to the constitution of the active area arrangements, it is respectfully submitted that these are fully explained in the text of the application as filed in a manner complying with 35 U.S.C. § 112 1<sup>st</sup> para.

Page 12 lines 4-22 describe that the active area arrangements are areal formations on which the field lines of the magnetic field generation system penetrate the flow channel inner wall. They lie on the flow channel inner wall between the measuring electrodes and extend both circumferentially as well as

-7-

axially. Specific examples of active area arrangements are shown in Figures 7A - 7F, which necessarily are rendered on flat paper but describe a curved section of the inner wall of the flow channel 1.

Attached hereto are two drawings that illustrate the active area arrangements in place on the inner wall of the flow channel. These are provided to assist the Examiner in understanding the point being made above, i.e., that the active area arrangements are areas of the curved inner wall of the flow channel. It is respectfully submitted that the application as originally filed fully describes the active area arrangements, but the Examiner may deem it desirable that these two drawings be included in the application for greater clarity and/or ease of understanding. Applicant will gladly accommodate such a request if made. There is not seen to be any issue of new matter, given that the application as filed is seen to describe this aspect of the active area arrangements.

Based on the above, the active area arrangements are physical areas of the inner wall of the flow channel which are bounded by imaginary curve(s) as shown in solid lines in Figures 7A - 7F (lines bounding areas Fa, Fb, etc.).

With respect to the term "restricted fashion" utilized in the claims, it is respectfully submitted that this aspect of the claimed invention is also fully described in the specification. For example, page 13 lines 21-27 recite that the "magnetic field lines ... permeate the bounding inner wall of the flow channel section 1 in a fashion respectively most largely restricted to cylindrical active area arrangements situated diametrically opposite one another...". This clearly describes that the magnetic field lines permeate the inner wall of the flow channel such that they are restricted to the cylindrical active area arrangements, i.e., that there is little or no field permeating the inner wall of the flow channel outside of the active area arrangements. This restriction of the field lines is in contrast, for example, to the relatively unrestricted arrangement of field lines shown in Figure 1. Here again, for the sake of explanation the attached two drawings show the field lines permeating the inner wall of the flow channel within the active area arrangements only, which again is believed to be clear from the application as

filed. Nonetheless, Applicant will gladly consider adding one or more drawings such as the attached drawings if it is believed that greater clarity or ease of understanding will result.

With respect to the phrase "as well as between the latter", claim 1 has been amended to replace the word "latter" with "measuring electrodes", which is the reference being made. It is believed that this amendment overcomes this objection, as the specification clearly describes that the area of penetration of the inner wall of the flow channel extends between the measuring electrodes arranged on opposite sides thereof.

With respect to the phrase "bounding straight lines...active area", Figures 7A - 7F of the application are seen to provide numerous clear examples of this aspect of claim 1. The bounding lines are shown as T1 and T2 - these are laid tangentially against the active area arrangements Fa, Fb etc. in two places such that they converge toward the measuring electrode 3, for example. The Examiner is also referred to page 14 lines 19-34 of the application text. This claim element, which is clearly a recitation of imaginary lines, provides a limitation on the shape of the active area arrangements, i.e., that the active area arrangements include concave regions (K) in which the boundary lines of the active area arrangements have no points of contact of any sort with these tangential bounding straight lines. Thus it is respectfully submitted that the claim clearly defines what and how the lines are referred - they are referred to the active area arrangements as well as the measuring electrodes, and they are referred in the manner specified, i.e., as tangentially to the active area arrangements at two places separated by respective concave regions, and converging toward the respective measuring electrodes. Accordingly, this phrase is seen to be clearly supported by the specification as filed and therefore in compliance with 35 U.S.C. § 112, 1<sup>st</sup> paragraph.

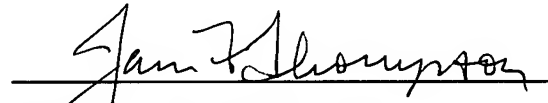
Conclusion

In view of the amendments and remarks herein, this Application should now be in condition for allowance. A Notice to this affect is respectfully requested. If the Examiner believes, after this Response, that the Application is not in condition for allowance, the Examiner is respectfully requested to call the Applicant's Representative at the number below.

Applicant hereby petitions for any extension of time which is required to maintain the pendency of this case. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50-3661.

If the enclosed papers or fees are considered incomplete, the Patent Office is respectfully requested to contact the undersigned collect at (508) 616-2900, in Westborough, Massachusetts.

Respectfully submitted,



James F. Thompson, Esq.  
Attorney for Applicant(s)  
Registration No.: 36,699  
Bainwood, Huang & Associates, L.L.C.  
Highpoint Center  
2 Connector Road  
Westborough, Massachusetts 01581  
Telephone: (508) 616-2900  
Facsimile: (508) 366-4688

Attorney Docket No.: 1022-003

Dated: May 23, 2007

Enclosure - drawings showing active area arrangements on inner wall of flow channel